

REMARKS/ARGUMENTS

The present communication responds to the Office Action dated January 11, 2006. In that Office Action, the Examiner rejected claims 1-6, 10-12, and 16-19 under 35 U.S.C. § 102(a). The Examiner further rejected claims 7-9, 13-15, and 20 under 35 U.S.C. § 103(a).

The Applicants have herewith amended claims 1, 3, and 16-19, cancelled claims 2, 7-9, 13-15 and 20, and added claims 21-28. Claims 1, 3-6, 10-12, 16-19, and 21-28 are pending. No new matter has been added by these amendments. In view of the amendments and the following remarks, the Applicants respectfully request reconsideration and allowance of the pending claims.

Claim Rejections Under 35 U.S.C. § 102

Claims 1, 3-6, 10-12, and 16-19 are Not Anticipated by Comair

Claims 1, 3-6, 10-12, and 16-19 were rejected under 35 U.S.C. § 102(a) as being anticipated by Comair et al. (2003/0037664). The Applicants respectfully disagree.

A rejection under § 102 requires that each and every limitation of the claimed invention be disclosed in a single prior art reference. In other words, there must be no difference between the claimed invention and the prior art reference disclosure as viewed by a person of ordinary skill in the art.

Claim 1 is Not Anticipated by Comair

Claim 1, as amended, is directed to an interactive music apparatus. The apparatus of claim 1 comprises, in part, “a visual component comprising a display monitor and configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises displaying a keyboard on the display monitor and indicating a key on the keyboard corresponding to the sound emitted based on the first output signal.”

Comair, in contrast, fails to teach or suggest “a visual component comprising a display monitor and configured to receive the second output signal and perform an action based on the

second output signal, wherein the action based on the second output signal comprises displaying a keyboard on the display monitor and indicating a key on the keyboard corresponding to the sound emitted based on the first output signal.” Rather, Comair discloses a dynamic music composition video game system which uses “individually composed musical compositions,” wherein “[t]ransitions between states are defined based on [the] exit point of [the] current state and [the] entrance point into the new state.” (*Comair, Abstract*). The user’s input directly controls what is displayed visually but only indirectly what is heard. (*Comair, p. 4, paras. [0038], [0041]-[0042]*). That is, the player’s input affects one or more interactivity parameters, which in turn determine when transitions between songs will happen. (*Comair, p. 5, paras. [0069]-[0075]*). Different game players “will experience different dynamically-generated overall musical compositions – but with the musical compositions based on musical composition building blocks thoughtfully precomposed by a human musical composer in advance.” (*Comair, p. 1, para. [0010]*).

Comair further discloses a system including a graphics and audio processor that can process commands to generate interesting visual images on a display and interesting stereo sound on stereo loudspeakers. (*Comair, p. 4, para. [0048]*). Nothing in Comair, however, relates to “a visual component comprising a display monitor and configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises displaying a keyboard on the display monitor and indicating a key on the keyboard corresponding to the sound emitted based on the first output signal.” Thus, Comair fails to teach or suggest the invention of claim 1. Reconsideration and withdrawal of the rejection is respectfully requested.

Claims Depending from Claim 1 Are Not Anticipated by Comair

Claims 3-6 and 10-12, which depend directly or indirectly from claim 1, incorporate all the limitations of claim 1 and are, therefore, also not anticipated by Comair.

Claim 16 is Not Anticipated by Comair

Claim 16, as amended, is directed to a method of music performance and composition. The method of claim 16 comprises, in part, “performing an action at an output component based

on the second output signal, wherein the action at an output component based on the second output signal comprises at least one of displaying a keyboard in conjunction with indicating a key on the keyboard corresponding to the sound emitted based on the first output signal, displaying a music staff in conjunction with indicating an appropriate note in an appropriate location on the music staff corresponding to the sound emitted based on the first output signal, and displaying light at an at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.”

Comair, in contrast, fails to teach or suggest “performing an action at an output component based on the second output signal, wherein the action at an output component based on the second output signal comprises at least one of displaying a keyboard in conjunction with indicating a key on the keyboard corresponding to the sound emitted based on the first output signal, displaying a music staff in conjunction with indicating an appropriate note in an appropriate location on the music staff corresponding to the sound emitted based on the first output signal, and displaying light at an at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.” Rather, as stated previously, Comair discloses a dynamic music composition video game system which uses “individually composed musical compositions,” wherein “[t]ransitions between states are defined based on [the] exit point of [the] current state and [the] entrance point into the new state.” (*Comair, Abstract*). The player’s input affects one or more interactivity parameters, which in turn determine when transitions between songs will happen. (*Comair, p. 5, paras. [0069]-[0075]*). Comair further discloses a system including a graphics and audio processor that can process commands to generate interesting visual images on a display and interesting stereo sound on stereo loudspeakers. (*Comair, p. 4, para. [0048]*). Nothing in Comair, however, relates to “displaying a keyboard in conjunction with indicating a key on the keyboard corresponding to the sound emitted based on the first output signal.” Similarly, Comair fails to teach or suggest “displaying a music staff in conjunction with indicating an appropriate note in an appropriate location on the music staff corresponding to the sound emitted based on the first output signal.” Finally, Comair does not teach or suggest “displaying light at an at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.” Thus, Comair fails to teach or suggest the invention of claim 16. Reconsideration and withdrawal of the rejection is respectfully requested.

Claims Depending from Claim 16 Are Not Anticipated by Comair

Claims 17-19, which depend directly or indirectly from claim 16, incorporate all the limitations of claim 16 and are, therefore, also not anticipated by Comair.

Claim 21 is Not Anticipated by Comair

Claim 21 is directed to an interactive music apparatus. The apparatus of claim 21 comprises, in part, “a visual component configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises at least one of displaying a music staff on a display monitor in conjunction with indicating an appropriate note in an appropriate location on the music staff corresponding to the sound emitted based on the first output signal and displaying light on at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.”

Comair, in contrast, fails to teach or suggest “a visual component configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises at least one of displaying a music staff on a display monitor in conjunction with indicating an appropriate note in an appropriate location on the music staff corresponding to the sound emitted based on the first output signal and displaying light on at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.” Rather, as stated previously, Comair discloses a dynamic music composition video game system which uses “individually composed musical compositions,” wherein “[t]ransitions between states are defined based on [the] exit point of [the] current state and [the] entrance point into the new state.” (*Comair, Abstract*). The player’s input affects one or more interactivity parameters, which in turn determine when transitions between songs will happen. (*Comair, p. 5, paras. [0069]-[0075]*). Comair further discloses a system including a graphics and audio processor that can process commands to generate interesting visual images on a display and interesting stereo sound on stereo loudspeakers. (*Comair, p. 4, para. [0048]*). Nothing in Comair, however, relates to “a visual component configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises . . . displaying a music staff on a

display monitor in conjunction with indicating an appropriate note in an appropriate location on the music staff corresponding to the sound emitted based on the first output signal.” Similarly, nothing in Comair relates to “a visual component configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises . . . displaying light on at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.” Thus, Comair fails to teach or suggest the invention of claim 21.

Claim Rejections Under 35 U.S.C. § 103

Rejection of Claims 7 and 8

Claims 7 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Comair et al. in view of Georges et al. (2004/0089142). The Applicants have cancelled claims 7 and 8. Nonetheless, claims 7 and 8 have been incorporated into independent claims. As such, the Applicants respectfully disagree with the rejections for at least the following reasons.

Claim 1 is Not Made Obvious by Comair in view of Georges

As noted above, independent claim 1 (wherein claim 7 was incorporated), is directed to an interactive music apparatus comprising “a visual component comprising a display monitor and configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises displaying a keyboard on the display monitor and indicating a key on the keyboard corresponding to the sound emitted based on the first output signal.”

Neither Comair nor Georges, alone or in combination, teach or suggest the invention of claim 1. As discussed above, Comair fails to teach or suggest “a visual component comprising a display monitor and configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises displaying a keyboard on the display monitor and indicating a key on the keyboard corresponding to the sound emitted based on the first output signal.” Rather, Comair discloses a dynamic music composition video game system which uses “individually composed musical compositions.” (*Comair, Abstract*). Comair, at most, discloses a system including a graphics

and audio processor that can process commands to generate interesting visual images on a display and interesting stereo sound on stereo loudspeakers. (*Comair*, p. 4, para. [0048]). As such, Comair fails to teach or suggest the invention of claim 1.

Georges fails to remedy the deficiencies of Comair. Georges discloses a system for creating, modifying, interacting with and playing music. (*Georges*, *Abstract*). Georges does not teach or suggest an interactive music apparatus comprising “a visual component comprising a display monitor and configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises displaying a keyboard on the display monitor and indicating a key on the keyboard corresponding to the sound emitted based on the first output signal.”

In fact, Georges fails to teach or suggest displaying a keyboard on the display monitor as suggested by the Examiner. The Applicants respectfully point the Examiner to Georges paragraphs [0174], which describes Figure 18 in detail. Figure 18 is an illustration including a keyboard. This illustration, however, is referenced by the Detailed Description merely to describe the algorithms used in the Georges device. This illustration is *not* displayed on the display monitor. In any respect, nothing in Georges relates to “indicating a key on the keyboard corresponding to the sound emitted based on the first output signal.” Thus, for at least these reasons, neither Comair nor Georges, alone or in combination, teach or suggest the invention of claim 1.

Claim 21 is Not Made Obvious by Comair in view of Georges

As noted above, independent claim 21 (wherein claim 8 was incorporated), is directed to an interactive music apparatus comprising “a visual component configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises at least one of displaying a music staff on a display monitor in conjunction with indicating an appropriate note in an appropriate location on the music staff corresponding to the sound emitted based on the first output signal and displaying light on at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.”

Neither Comair nor Georges, alone or in combination, teach or suggest the invention of claim 21. As discussed above, Comair fails to teach or suggest “a visual component configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises . . . displaying a music staff on a display monitor in conjunction with indicating an appropriate note in an appropriate location on the music staff corresponding to the sound emitted based on the first output signal.” Rather, Comair discloses a dynamic music composition video game system which uses “individually composed musical compositions.” (*Comair, Abstract*). Comair, at most, discloses a system including a graphics and audio processor that can process commands to generate interesting visual images on a display and interesting stereo sound on stereo loudspeakers. (*Comair, p. 4, para. [0048]*). As such, Comair fails to teach or suggest the invention of claim 21.

Georges fails to remedy the deficiencies of Comair. Georges discloses a system for creating, modifying, interacting with and playing music. (*Georges, Abstract*). Georges does not teach or suggest an interactive music apparatus comprising “a visual component configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises . . . displaying a music staff on a display monitor in conjunction with indicating an appropriate note in an appropriate location on the music staff corresponding to the sound emitted based on the first output signal.”

In fact, Georges fails to teach or suggest displaying a music staff on the display monitor as suggested by the Examiner. The Applicants respectfully point the Examiner to Georges paragraphs [0179]-[0186], which describes Figure 21 in detail. Figure 21 is an illustration including a music staff. This illustration, however, is referenced by the Detailed Description merely to describe the algorithms used in the Georges device. This illustration is *not* displayed on the display monitor. In any respect, nothing in Georges relates to “indicating an appropriate note in an appropriate location on the music staff corresponding to the sound emitted based on the first output signal.” Thus, for at least these reasons, neither Comair nor Georges, alone or in combination, teach or suggest the invention of claim 21.

Rejection of Claims 9, 13-15, and 20

Claims 9, 13-15, and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Comair et al. in view of Airaudi et al. (6,743,164). The Applicants have cancelled claims 9, 13-15, and 20. Nonetheless, claims 9 and 20 have been incorporated into independent claims. As such, the Applicants respectfully disagree with the rejection for at least the following reasons.

Claim 21 is Not Made Obvious by Comair in view of Airaudi

As noted above, claim 21 (wherein claim 9 was incorporated), is directed to an interactive music apparatus comprising “a visual component configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises at least one of displaying a music staff on a display monitor in conjunction with indicating an appropriate note in an appropriate location on the music staff corresponding to the sound emitted based on the first output signal and displaying light on at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.”

Neither Comair nor Airaudi, alone or in combination, teach or suggest the invention of claim 21. As discussed above, Comair fails to teach or suggest “a visual component configured to receive the second output signal and perform an action based on the second output signal, wherein the action based on the second output signal comprises . . . displaying light on at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.” Rather, Comair discloses a dynamic music composition video game system which uses “individually composed musical compositions.” (*Comair, Abstract*). Comair, at most, discloses a system including a graphics and audio processor that can process commands to generate interesting visual images on a display and interesting stereo sound on stereo loudspeakers. (*Comair, p. 4, para. [0048]*). As such, Comair fails to teach or suggest the invention of claim 21.

Airaudi fails to remedy the deficiencies of Comair. Airaudi discloses an electronic device to detect and generate music from biological microvariations in a living organism. (*Airaudi, Abstract*). Airaudi simply does not teach or suggest “displaying light on at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.” In fact, in Airaudi, there is no sound emitted based on a first output signal for

which to correspond a displayed light. Thus, for at least these reasons, neither Comair nor Airaudi, alone or in combination, teach or suggest the invention of claim 21.

Claim 16 is Not Made Obvious by Comair in view of Airaudi

As noted above, claim 16 (wherein claim 20 is incorporated), is directed to a method of music performance and composition comprising, in part, “performing an action at an output component based on the second output signal, wherein the action at an output component based on the second output signal comprises at least one of displaying a keyboard in conjunction with indicating a key on the keyboard corresponding to the sound emitted based on the first output signal, displaying a music staff in conjunction with indicating an appropriate note in an appropriate location on the music staff corresponding to the sound emitted based on the first output signal, and displaying light at an at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.”

Neither Comair nor Airaudi, alone or in combination, teach or suggest the invention of claim 16. As discussed above, Comair fails to teach or suggest “performing an action at an output component based on the second output signal, wherein the action at an output component based on the second output signal comprises . . . displaying light at an at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.” Rather, Comair discloses a dynamic music composition video game system which uses “individually composed musical compositions.” (*Comair, Abstract*). Comair, at most, discloses a system including a graphics and audio processor that can process commands to generate interesting visual images on a display and interesting stereo sound on stereo loudspeakers. (*Comair, p. 4, para. [0048]*). As such, Comair fails to teach or suggest the invention of claim 16.

Airaudi fails to remedy the deficiencies of Comair. Airaudi discloses an electronic device to detect and generate music from biological microvariations in a living organism. (*Airaudi, Abstract*). Airaudi simply does not teach or suggest “displaying light at an at least one light controlled by a lighting controller and corresponding to the sound emitted based on the first output signal.” In fact, in Airaudi, there is no sound emitted based on a first output signal for

which to correspond a displayed light. Thus, for at least these reasons, neither Comair nor Airaudi, alone or in combination, teach or suggest the invention of claim 16.

CONCLUSION

No additional claim fees should be generated by this paper. However, the Commissioner is hereby authorized to charge any fee deficiency associated with this paper to Deposit Account No. 04-1420.

This application now stands in allowable form and reconsideration and allowance is respectfully requested.

Respectfully submitted,

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June 12, 2006

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